

MEMORANDUM

State of Alaska

Department of Transportation and Public Facilities
Statewide Design and Engineering Services Division

TO: SEE DISTRIBUTION

DATE: May 28, 2002

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FROM: Michael L. Downing, P.E.
Chief Engineer



SUBJECT: Detectable Warnings
Required on Curb Ramps

Please install detectable warnings (tactile strips designed to warn pedestrians with visual disabilities that they are about to enter a street) on active construction projects (meaning those with physical construction work yet to be completed) now, and include them in plans for all future projects. The FHWA (see attachment) notified us 5/6/02 that this is a legal requirement.

Install detectable warnings in the following locations:

- 1) on curb ramps (not including ramps for driveways),
- 2) where a railroad crosses sidewalks or trails, except where the railroad runs down the middle of a street, and
- 3) at cut-through islands and medians.

Detectable warnings are also required at flush connections between pedestrian and vehicular ways. However, there are conflicting instructions in the ADAAG and the latest guidance on where to locate these. In addition, we need more information on how to install them in a way that will last. For these reasons, do not install detectable warnings at locations other than 1-3 above until further notice.

We have a consultant working on a standard drawing showing how to install detectable warnings on curb ramps (the most common application). However, that will not be finished for several months. Please install truncated domes now in accordance with the sections X02.5.6.2 through X02-5.7.3 of *Building A True Community: Accessible Public Rights-of-Ways* (attached) and the following:

Do not color the concrete for curb ramps and landings (this supercedes the direction in our standard drawings to provide red concrete).

Use detectable warnings consisting of truncated domes and an underlying field with the following characteristics:

1. "Safety Yellow" colored field and truncated domes.
2. Truncated dome base diameter: 0.9 inches (23 mm), top diameter: 0.4 inches (10 mm), height: 0.2 inches (5 mm) and center-to-center spacing: 2.35 inches (60 mm)
3. Slip resistant and stable surface on the truncated domes and field.
4. No vertical changes in grade exceeding 1/4 inch (6 mm), or any gaps exceeding 1/2 inch (13 mm) in width in the field, including its boundaries
5. Align truncated domes on a square grid, in the predominant direction of travel to permit wheels to roll between domes.

On new concrete pours, install cast-in-place composite detectable warning tiles such as Armor Tile Cast-In-Place In-Line Tactile Panels, manufactured by Engineered Plastics, Inc., or approved equivalent.

On existing cured concrete (retro-fits), install either:

1. surface-applied panels such as Sure-Step Tactile Panels by Brickform, Inc., Armor Tile Surface Applied Panels by Engineered Plastics, Inc., Detectable Warning Mats by Detectable Warning Systems, Inc, or approved equivalent, or;
2. Molded-in-place epoxy systems such as Strongwarn, manufactured by Strongwall, Inc., or approved equivalent.

Because surface-applied detectable warnings are likely to be more of a long-term maintenance problem, we should try to install as many cast-in-place detectable warnings as possible.

In addition to being a significant aid to visually impaired pedestrians engaged in the difficult task of street crossing, detectable warnings are legally required. That is why this direction precedes completion of statewide standard drawings and specifications.

Thank you.

Attachments

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